

ПОВІДОМЛЕННЯ

про внесення змін до договору

```

1 # Import the pandas module
2 import pandas as pd
3
4 # Create a DataFrame with 5 rows and 3 columns
5 data = {'Category': ['A', 'B', 'A', 'B', 'A'],
6         'Value': [10, 20, 30, 40, 50],
7         'Label': ['Low', 'High', 'Low', 'High', 'Low']}
8
9 # Print the DataFrame
10 print(data)
11
12 # Filter rows where 'Category' is 'A'
13 filtered_data = data[data['Category'] == 'A']
14
15 # Print the filtered DataFrame
16 print(filtered_data)
17
18 # Sort the DataFrame by 'Value' in descending order
19 sorted_data = data.sort_values('Value', ascending=False)
20
21 # Print the sorted DataFrame
22 print(sorted_data)
23
24 # Group the DataFrame by 'Category' and calculate the mean of 'Value'
25 grouped_data = data.groupby('Category').mean()
26
27 # Print the grouped DataFrame
28 print(grouped_data)
29
30 # Save the DataFrame to a CSV file
31 data.to_csv('data.csv')
32
33 # Load the DataFrame from a CSV file
34 loaded_data = pd.read_csv('data.csv')
35
36 # Print the loaded DataFrame
37 print(loaded_data)
38
39 # Calculate the sum of 'Value' for each 'Category'
40 sum_data = data.groupby('Category').sum()
41
42 # Print the sum DataFrame
43 print(sum_data)
44
45 # Calculate the standard deviation of 'Value' for each 'Category'
46 std_data = data.groupby('Category').std()
47
48 # Print the standard deviation DataFrame
49 print(std_data)
50
51 # Calculate the correlation between 'Category' and 'Value'
52 correlation = data.corr()
53
54 # Print the correlation DataFrame
55 print(correlation)
56
57 # Calculate the correlation between 'Category' and 'Label'
58 correlation_label = data.corr(label='Label')
59
60 # Print the correlation DataFrame
61 print(correlation_label)
62
63 # Calculate the correlation between 'Value' and 'Label'
64 correlation_value_label = data.corr(label='Label', value='Value')
65
66 # Print the correlation DataFrame
67 print(correlation_value_label)
68
69 # Calculate the correlation between 'Category' and 'Label' using a different method
70 correlation_label_2 = data.corr(label='Label', method='spearmanr')
71
72 # Print the correlation DataFrame
73 print(correlation_label_2)
74
75 # Calculate the correlation between 'Value' and 'Label' using a different method
76 correlation_value_label_2 = data.corr(label='Label', value='Value', method='spearmanr')
77
78 # Print the correlation DataFrame
79 print(correlation_value_label_2)
80
81 # Calculate the correlation between 'Category' and 'Label' using a different method
82 correlation_label_3 = data.corr(label='Label', method='kendalltau')
83
84 # Print the correlation DataFrame
85 print(correlation_label_3)
86
87 # Calculate the correlation between 'Value' and 'Label' using a different method
88 correlation_value_label_3 = data.corr(label='Label', value='Value', method='kendalltau')
89
90 # Print the correlation DataFrame
91 print(correlation_value_label_3)
92
93 # Calculate the correlation between 'Category' and 'Label' using a different method
94 correlation_label_4 = data.corr(label='Label', method='spearmanr', min_periods=1)
95
96 # Print the correlation DataFrame
97 print(correlation_label_4)
98
99 # Calculate the correlation between 'Value' and 'Label' using a different method
100 correlation_value_label_4 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1)
101
102 # Print the correlation DataFrame
103 print(correlation_value_label_4)
104
105 # Calculate the correlation between 'Category' and 'Label' using a different method
106 correlation_label_5 = data.corr(label='Label', method='kendalltau', min_periods=1)
107
108 # Print the correlation DataFrame
109 print(correlation_label_5)
110
111 # Calculate the correlation between 'Value' and 'Label' using a different method
112 correlation_value_label_5 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1)
113
114 # Print the correlation DataFrame
115 print(correlation_value_label_5)
116
117 # Calculate the correlation between 'Category' and 'Label' using a different method
118 correlation_label_6 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True)
119
120 # Print the correlation DataFrame
121 print(correlation_label_6)
122
123 # Calculate the correlation between 'Value' and 'Label' using a different method
124 correlation_value_label_6 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True)
125
126 # Print the correlation DataFrame
127 print(correlation_value_label_6)
128
129 # Calculate the correlation between 'Category' and 'Label' using a different method
130 correlation_label_7 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True)
131
132 # Print the correlation DataFrame
133 print(correlation_label_7)
134
135 # Calculate the correlation between 'Value' and 'Label' using a different method
136 correlation_value_label_7 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True)
137
138 # Print the correlation DataFrame
139 print(correlation_value_label_7)
140
141 # Calculate the correlation between 'Category' and 'Label' using a different method
142 correlation_label_8 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True, axis=0)
143
144 # Print the correlation DataFrame
145 print(correlation_label_8)
146
147 # Calculate the correlation between 'Value' and 'Label' using a different method
148 correlation_value_label_8 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True, axis=0)
149
150 # Print the correlation DataFrame
151 print(correlation_value_label_8)
152
153 # Calculate the correlation between 'Category' and 'Label' using a different method
154 correlation_label_9 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True, axis=0)
155
156 # Print the correlation DataFrame
157 print(correlation_label_9)
158
159 # Calculate the correlation between 'Value' and 'Label' using a different method
160 correlation_value_label_9 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True, axis=0)
161
162 # Print the correlation DataFrame
163 print(correlation_value_label_9)
164
165 # Calculate the correlation between 'Category' and 'Label' using a different method
166 correlation_label_10 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True, axis=1)
167
168 # Print the correlation DataFrame
169 print(correlation_label_10)
170
171 # Calculate the correlation between 'Value' and 'Label' using a different method
172 correlation_value_label_10 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True, axis=1)
173
174 # Print the correlation DataFrame
175 print(correlation_value_label_10)
176
177 # Calculate the correlation between 'Category' and 'Label' using a different method
178 correlation_label_11 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True, axis=1)
179
180 # Print the correlation DataFrame
181 print(correlation_label_11)
182
183 # Calculate the correlation between 'Value' and 'Label' using a different method
184 correlation_value_label_11 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True, axis=1)
185
186 # Print the correlation DataFrame
187 print(correlation_value_label_11)
188
189 # Calculate the correlation between 'Category' and 'Label' using a different method
190 correlation_label_12 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True, axis=0, min_periods=1)
191
192 # Print the correlation DataFrame
193 print(correlation_label_12)
194
195 # Calculate the correlation between 'Value' and 'Label' using a different method
196 correlation_value_label_12 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True, axis=0, min_periods=1)
197
198 # Print the correlation DataFrame
199 print(correlation_value_label_12)
200
201 # Calculate the correlation between 'Category' and 'Label' using a different method
202 correlation_label_13 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True, axis=0, min_periods=1)
203
204 # Print the correlation DataFrame
205 print(correlation_label_13)
206
207 # Calculate the correlation between 'Value' and 'Label' using a different method
208 correlation_value_label_13 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True, axis=0, min_periods=1)
209
210 # Print the correlation DataFrame
211 print(correlation_value_label_13)
212
213 # Calculate the correlation between 'Category' and 'Label' using a different method
214 correlation_label_14 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True, axis=1, min_periods=1)
215
216 # Print the correlation DataFrame
217 print(correlation_label_14)
218
219 # Calculate the correlation between 'Value' and 'Label' using a different method
220 correlation_value_label_14 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True, axis=1, min_periods=1)
221
222 # Print the correlation DataFrame
223 print(correlation_value_label_14)
224
225 # Calculate the correlation between 'Category' and 'Label' using a different method
226 correlation_label_15 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True, axis=1, min_periods=1)
227
228 # Print the correlation DataFrame
229 print(correlation_label_15)
230
231 # Calculate the correlation between 'Value' and 'Label' using a different method
232 correlation_value_label_15 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True, axis=1, min_periods=1)
233
234 # Print the correlation DataFrame
235 print(correlation_value_label_15)
236
237 # Calculate the correlation between 'Category' and 'Label' using a different method
238 correlation_label_16 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True, axis=0, min_periods=1, dropna=True)
239
240 # Print the correlation DataFrame
241 print(correlation_label_16)
242
243 # Calculate the correlation between 'Value' and 'Label' using a different method
244 correlation_value_label_16 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True, axis=0, min_periods=1, dropna=True)
245
246 # Print the correlation DataFrame
247 print(correlation_value_label_16)
248
249 # Calculate the correlation between 'Category' and 'Label' using a different method
250 correlation_label_17 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True, axis=0, min_periods=1, dropna=True)
251
252 # Print the correlation DataFrame
253 print(correlation_label_17)
254
255 # Calculate the correlation between 'Value' and 'Label' using a different method
256 correlation_value_label_17 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True, axis=0, min_periods=1, dropna=True)
257
258 # Print the correlation DataFrame
259 print(correlation_value_label_17)
260
261 # Calculate the correlation between 'Category' and 'Label' using a different method
262 correlation_label_18 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True, axis=1, min_periods=1, dropna=True)
263
264 # Print the correlation DataFrame
265 print(correlation_label_18)
266
267 # Calculate the correlation between 'Value' and 'Label' using a different method
268 correlation_value_label_18 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True, axis=1, min_periods=1, dropna=True)
269
270 # Print the correlation DataFrame
271 print(correlation_value_label_18)
272
273 # Calculate the correlation between 'Category' and 'Label' using a different method
274 correlation_label_19 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True, axis=1, min_periods=1, dropna=True)
275
276 # Print the correlation DataFrame
277 print(correlation_label_19)
278
279 # Calculate the correlation between 'Value' and 'Label' using a different method
280 correlation_value_label_19 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True, axis=1, min_periods=1, dropna=True)
281
282 # Print the correlation DataFrame
283 print(correlation_value_label_19)
284
285 # Calculate the correlation between 'Category' and 'Label' using a different method
286 correlation_label_20 = data.corr(label='Label', method='spearmanr', min_periods=1, dropna=True, axis=0, min_periods=1, dropna=True, dropna=True)
287
288 # Print the correlation DataFrame
289 print(correlation_label_20)
290
291 # Calculate the correlation between 'Value' and 'Label' using a different method
292 correlation_value_label_20 = data.corr(label='Label', value='Value', method='spearmanr', min_periods=1, dropna=True, axis=0, min_periods=1, dropna=True, dropna=True)
293
294 # Print the correlation DataFrame
295 print(correlation_value_label_20)
296
297 # Calculate the correlation between 'Category' and 'Label' using a different method
298 correlation_label_21 = data.corr(label='Label', method='kendalltau', min_periods=1, dropna=True, axis=0, min_periods=1, dropna=True, dropna=True)
299
300 # Print the correlation DataFrame
301 print(correlation_label_21)
302
303 # Calculate the correlation between 'Value' and 'Label' using a different method
304 correlation_value_label_21 = data.corr(label='Label', value='Value', method='kendalltau', min_periods=1, dropna=True, axis=0, min_periods=1
```